



# CDF Operations Report

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All Experiments' Meeting  
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# Store Summary

Store	Start Date	Time [hrs]	Uptime [hrs]	Initial Lumi	Delivered Lumi	Live Lumi	Eff.	Comments
4279	7/17	27.3	24.3 [93%]	105.8	3.82	3.07	80%	Silicon / Calorimeter HV trip
4280	7/18	16.5	15.5 [94%]	111.0	3.07	2.56	83%	Slow startup w/ high proton loss
4285	7/19	24.4	17.3 [71%]	72.8	2.50	1.29	52%	Slow startup w/ many problems. SVT tests
4287	7/21	0.4	0.2 [50%]	111.0	0.2	0.06	39%	Aborted due to booster quad dampers
<b>4291</b>	7/21	8.7	<b>8.6 [99%]</b>	59.9	<b>1.21</b>	<b>1.15</b>	<b>95%</b>	Smooth running, TeV quenched
<b>4293</b>	7/22	24.2	<b>23.9 [98%]</b>	91.7	<b>3.21</b>	<b>3.04</b>	<b>95%</b>	Smooth running
<b>4295</b>	7/24	27.9	<b>27.0 [96%]</b>	107.0	<b>3.91</b>	<b>3.61</b>	<b>93%</b>	Smooth running
Total	7/17 ~24	129.4	116.8 [90%]	94.2	17.9 pb <sup>-1</sup>	14.8 pb <sup>-1</sup>	83%	Excellent operations during weekend

# CDF Operations [1]

Lower efficiency for week (first 3 stores) had several contributing factors:

1. Significant down time comes from Shower-Max related L2 decision time out – fixed during controlled access
2. One bad TDC in the Central Outer Tracker  
– taken out and fixed during controlled access
3. Solenoid tripped due to power glitch from energizing feeder 47 which took our compressor out.
4. Several accelerator events forced us to standby
  - Store 4280 (slow start-up due to high proton loss)
  - Store 4287 (electron lens off at the beginning of store)

Good News: CDF took data with ~94% efficiency for last 3 stores, records 7.7 pb<sup>-1</sup> of data ☺☺☺

# CDF Operations [2]

- DAQ/Run Control
  - operated smoothly except a few problems with L2 DT outs
- Silicon/COT/Calorimeter/Muon
  - some downtime due to a couple of HV trips
- Several jobs were carried out during controlled accesses
  - 7/19 (Tue) Silicon-light level measurement, SMX
  - 7/21 (Thu) COT TDC replacement, swapped out the SMX card,
    - Tunnel access (RP board replaced)
  - 7/22 (Fri) powered cycled WHA (due to power glitch)
- System improvement works performed for
  - XFT timing, silicon vertex tracker upgrade, new trigger tables..
  - future hardware event builder upgrade

# Store 4293: 7/22~23

7/22 evening shift

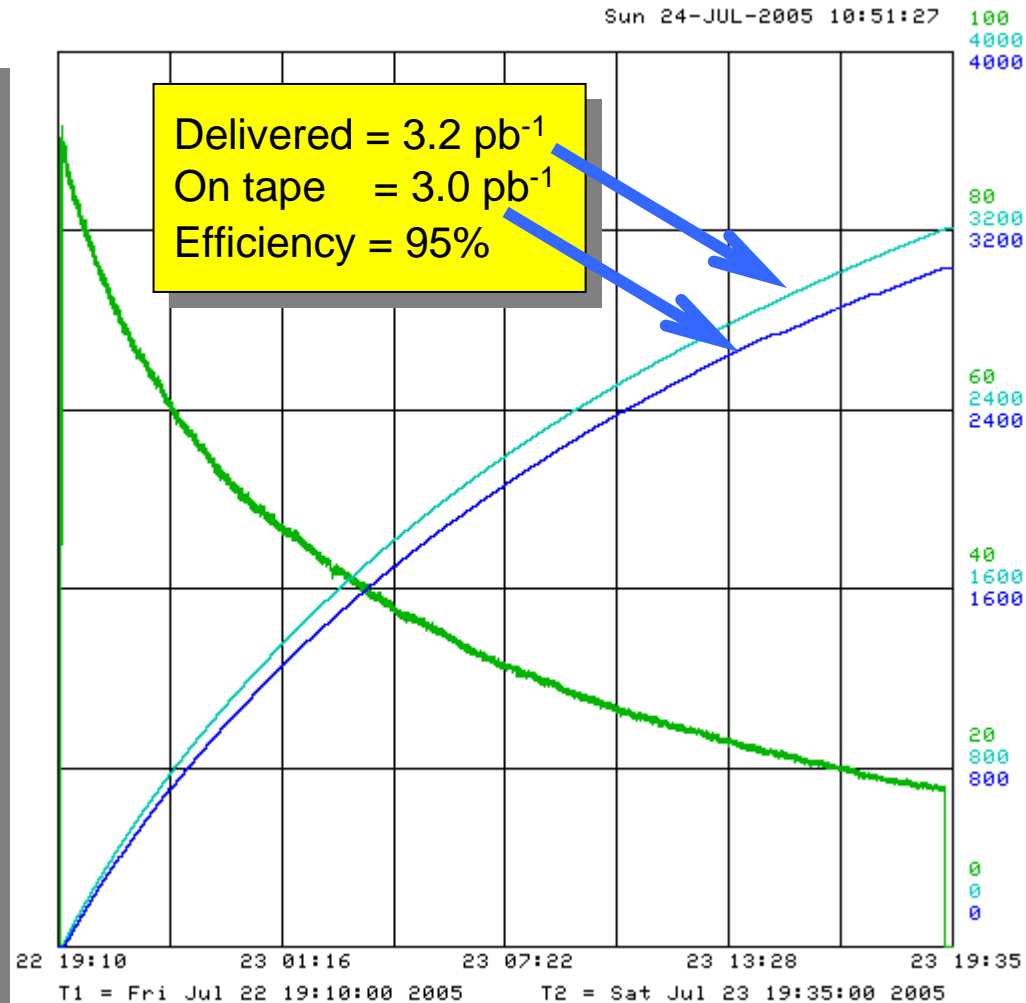
Best efficiency shift ~92.6%  
(including shot setup)

7/23 owl shift

Record efficiency shift ~96.5%

7/22~23 Store 4293

Record efficiency store ~95%



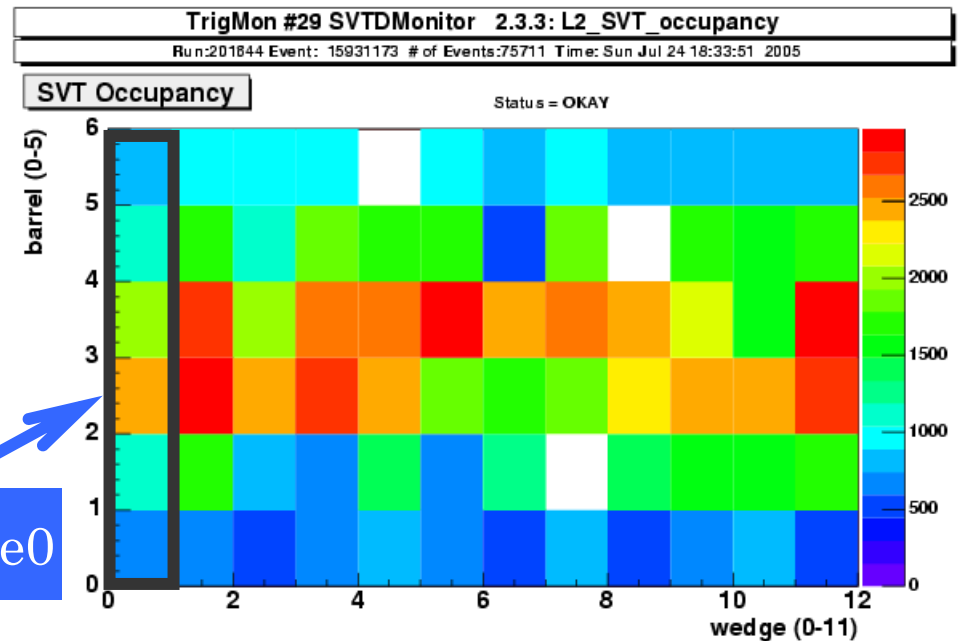
# Silcon Vertex Tracker Upgrade

Store 4285, First beam test with one SVT wedge (wedge0) using upgrade boards – Successful ☺

	Run 201371 (Old)	Run 201377 (New)
SVT Efficiency	$0.794 \pm 0.026$	$0.839 \pm 0.028$



SVT wedge0



# Run II Integrated Luminosity

